

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
14 December 2000 (14.12.2000)

PCT

(10) International Publication Number  
**WO 00/74713 A1**

(51) International Patent Classification<sup>7</sup>: **A61K 38/48**,  
B01L 11/00, C12N 9/74, C12Q 1/56, G01N 33/00

[US/US]; 7954 Graylodge Court, Sacramento, CA 95828 (US).

(21) International Application Number: PCT/US00/11865

(74) Agent: **KRETEN, Bernhard**; Bernhard Kreten, Esq. & Associates, Suite 245, 77 Cadillac Drive, Sacramento, CA 95825 (US).

(22) International Filing Date: 2 June 2000 (02.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
09/328,350 4 June 1999 (04.06.1999) US

(81) Designated States (*national*): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(71) Applicant (*for all designated States except US*): **THERMOGENESIS CORP.** [US/US]; 3146 Gold Camp Drive, Rancho Cordova, CA 95670 (US).

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **COELHO, Philip**, H. [US/US]; 121 Giotto Way, El Dorado Hills, CA 95762 (US). **KINGSLEY, Phil** [US/US]; 9560 Appalachian Drive, Sacramento, CA 95827 (US). **BRAUSCH, Jim** [US/US]; 6875 Villa Juarez Circle, Sacramento, CA 95828 (US). **GODSEY, James, H.** [US/US]; 101 Summer Shade Court, Folsom, CA 95630 (US). **ROCK, Gail** [CA/CA]; 270 Sandridge Road, Ottawa, Ontario K1L 5A2 (CA). **MADSEN, Trista, K.** [US/US]; 8782 Los Encantos Circle, Elk Grove, CA 95624 (US). **FRAUSTO, Sona, B.**

**Published:**

- With international search report.
- With amended claims.

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: AUTOLOGOUS THROMBIN

(57) Abstract: A sterile method for preparing stable thrombin component from a single donor's plasma in which the thrombin component and the clotting and adhesive proteins component are harvested simultaneously from the same donor plasma in less than one hour. The combined components provide an improved biological hemostatic agent and tissue sealant by virtue of its freedom from the risk of contaminating viruses or bacteria from allogenic human or bovine blood sources. The thrombin provides polymerization of the clotting and adhesive proteins in less than five seconds, and is sufficiently stable to provide that fast clotting over a six hour period. Further, the clotting times can be predictably lengthened by diluting the thrombin with saline.

20000614 2450007



WO 00/74713 A1